



# London Borough of Hounslow

## Mogden Sewage Treatment Works

### TW Site Inspection

**Date of inspection:** 26<sup>th</sup> July 2023

**Attendees:** Mr L. Phillips (London Borough of Hounslow) and Miss Emma McDonald (Thames Water)

#### LB Hounslow Observation

#### Thames Water Action / Response

#### **Storm Water Storage Tanks (SWST)**

**Tank 1A** – Tank empty clean – All Hoppers full and requires draining/over-pumping.

**Tank 1B** – Tank empty – Approx. 50% of tank covered by grit/sludge and requires flushing – Hoppers 1 and 2 approx. 40% full, Hopper 3 approx. 90% full and requires draining/over-pumping.

**Tank 2A** – Tank empty – Approx. 30% of tank covered by grit/sludge and requires flushing – All Hoppers full and requires draining/over-pumping.

**Tank 2B** – Tank empty – Approx. 50% of tank covered by grit/sludge and requires flushing – All Hoppers full and requires draining/over-pumping.

**Tank 3A** – Tank empty – Approx. 50% of tank covered by grit/sludge and requires flushing – All Hoppers full and require draining/over-pumping.

**Tank 3B** — Tank empty – Approx. 70% of tank covered by grit/sludge and requires flushing – All Hoppers full and require draining/over-pumping.

**Tanks 4A, 4B, 5A & 5B** which are covered, and odour controlled, were all in use - unable to gauge condition as lighting system still not working.

**Tank 6A** – Tank empty clean – All Hoppers full and require draining/over-pumping.

**Tank 6B** – Tank empty – Approx. 10% of tank covered by grit/sludge and requires flushing – All Hoppers approx. 50% full and require draining/over-pumping.

**Tank 7A** – Tank empty – 30% of tank covered by grit/sludge and requires flushing – All Hoppers full of grit and requires draining/over-pumping.

**Tank 7B** – Tank empty – 100% of tank covered by grit/sludge and require flushing – All Hoppers full of grit (shallow hoppers) and requires draining/over-pumping.

**Tank 8A** – Tank empty clean – All Hoppers full tank backfilling and requires draining/over-pumping.

**Tank 8B** – Tank empty – Approx. 50% of tank covered by grit/sludge and requires flushing – All Hoppers full and requires draining/over-pumping.

**Feed Channel** - The level of effluent in both feed channels was approximately 10% capacity.

**Sludge Dip Records**

Date	West PSTs 1	West PSTs 2	West PSTs 3	West Total	East PSTs	Grand Total
	All units in m <sup>3</sup>					
OMP limit	500					
19/07/23	0	1030	679	1709	3235	4944
21/07/23	128	787	1449	2364	3059	5423

**Complaints**

The Council received no complaints by email from MRAG in the preceding week.

Thames Water controller advised that they had received no direct complaints in the preceding week.

The Council directly received no complaints by email in the preceding week.

The Council received no calls to the out of hours service.

### Odour Monitors

The odour readouts (H<sub>2</sub>S) for all monitors which were providing data at time of inspection 26/07/2023:

Monitor 1	0.000	ppm	11:20
Monitor 2	0.001	ppm	11:20
Monitor 3	0.000	ppm	11:20
Monitor 4	0.000	ppm	11:20
Monitor 5	0.000	ppm	11:20
Monitor 6	0.000	ppm	11:20
Monitor 7	0.000	ppm	11:21
Monitor 8	0.007	ppm	11:21
Monitor 9	0.000	ppm	11:21
Monitor 10	0.003	ppm	11:21
Monitor 11	0.000	ppm	11:21
Monitor 12	0.004	ppm	11:21
Monitor 13	0.000	ppm	11:21
Wind Speed	4.848	mph	11:21
Wind Direction	271.834°		11:21

**Odour Log (Thames):**

**Wednesday 19<sup>th</sup> July 2023:**

**DAY SHIFT**

**Temp.** Hot.

**Weather.** Sunny W/Patchy Clouds.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:**

No odour issues found or reported.

**Operational Issues/Causes:** Blank.

**Actions:** Blank.

**NIGHT SHIFT**

**Temp.** Warm.

**Weather.** Clear Night.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:**

OM3 0.022 23:35- 23:51 0.021 00:05 – 00.20.

**Operational Issues/Causes:**

OCU11 poor performance.

**Actions:** Blank.

**Thursday 20<sup>th</sup> July 2023:**

**DAY SHIFT**

**Temp.** Warm.

**Weather.** Sunny W/ Patchy clouds.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:**

No odour issues.

**Operational Issues/Causes:** Blank.

**Actions:** Blank.

**NIGHT SHIFT**

**Temp.** Cool.

**Weather.** Clear night.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:**

OM8 0.015 23:28 – 00:25 OM5 0.033 00:35 - 01:06 OM9 0.021 02:22 –

02:39.

**Operational Issues/Causes:**

Some odour from PAS odour from main drive.

**Actions:** Blank.

**Friday 21<sup>st</sup> July 2023:**

**DAY SHIFT**

**Temp.** Warm.

**Weather.** Sunny W/ Patchy clouds.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:**

OM3 0.047PPM 13:05 – 13:21 0.025ppm 17:49 – 18:06 OM10  
0.017ppm 16:38 – 16:53.

**Operational Issues/Causes:**

Customer complaint received at 10:15 from Clifden Road. Site around completed. Nothing out of the ordinary observed.

**Actions:** Blank.

**NIGHT SHIFT**

**Temp.** Cool.

**Weather.** Overcast night.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:**

No odour issues.

**Operational Issues/Causes:** Blank.

**Actions:** Blank.

**Saturday 22<sup>nd</sup> July 2023:**

**DAY SHIFT**

**Temp.** Cool.

**Weather.** Rain.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:** No odour issues.

**Operational Issues/Causes:** Blank.

**Actions:** Blank.

**NIGHT SHIFT**

**Temp.** Cool.

**Weather.** Rain.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:**

No odour issues found or reported.

**Operational Issues/Causes:** Blank.

**Actions:** Blank.

**Sunday 23<sup>rd</sup> July 2023:**

**DAY SHIFT**

**Temp.** Warm.

**Weather.** Sunny W/ Patchy clouds.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:**

No odour issues.

**Operational Issues/Causes:** Blank.

**Actions:** Blank.

**NIGHT SHIFT**

**Temp.** Cool.

**Weather.** Overcast.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:**

No odour issues found or reported.

**Operational Issues/Causes:** Blank.

**Actions:** Blank.

**Monday 24<sup>th</sup> July 2023:**

**DAY SHIFT**

**Temp.** Warm.

**Weather.** Cloudy.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:**

No odour issues.

**Operational Issues/Causes:** Blank.

**Actions:** Blank.

**NIGHT SHIFT**

**Temp.** Cool.

**Weather.** Overcast night.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:**

No odour issues found or reported.

**Operational Issues/Causes:** Blank.

**Actions:** Blank.

**Tuesday 25<sup>th</sup> July 2023:**

**DAY SHIFT**

**Temp.** Warm.

**Weather.** Sunny W/ Patchy clouds.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:**

OM8 13:13 – 13:24 max 0.02ppm.

**Operational Issues/Causes:**

No odour found in area around Power House.

**Actions:** Blank.

**NIGHT SHIFT**

**Temp.** Cool.

**Weather.** Clear night.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:**

OM8 0.018ppm 19:57 – 20:11.017ppm 11:58 – 22:53.



**Operational Issues/Causes:**

No odour detected around monitor 8.

**Actions:** Blank.

**Wednesday 26<sup>th</sup> July 2023:**

**DAY SHIFT**

**Temp.** Warm.

**Weather.** Sunny W/ Patchy clouds.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:**

No odour issues.

**Operational Issues/Causes:** Blank.

**Actions:** Blank.

**NIGHT SHIFT**

**Temp.** Cool.

**Weather.** Rain.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:**

No odour issues.

**Operational Issues/Causes:** Blank.

**Actions:** Blank.

**Thursday 27<sup>th</sup> July 2023:**

**DAY SHIFT**

**Temp.** Warm.

**Weather.** Cloudy W/ Sunny spells.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:**

No odour issues found or reported.

**Operational Issues/Causes:** Blank.

**Actions:** Blank.

**NIGHT SHIFT**

**Temp.** Warm.

**Weather.** Clear night.

**Odour Readings.** All OMU's in operation.

**Observations/Complaints:**

No odour issues.

**Operational Issues/Causes:** Blank.

**Actions:** Blank.

**Digesters**

**Digesters 1-4** – Out of use (permanent).

**Digester 5** – In use –Good thick seal- No evidence of spillage.

**Digester 6** - In use –Good thick seal- No evidence of spillage.

**Digester 7** - In use –Good thick seal- No evidence of spillage.

**Digester 8** - In use –Good thick seal- No evidence of spillage.

**Digester 9** - In use- Weak seal - No evidence of sludge spillage.

**Digester 10** - In use- Weak seal - No evidence of sludge spillage.

**Digester 11** - In use –Good thick seal- No evidence of spillage.

**Digester 12** - In use –Good thick seal- No evidence of spillage.

**Digester 13** – Out of use.

**Digester 14** – Out of use.

**Digester 15** – Out of use.

**Digester 16** – Out of use.

**Digester 17** - In use –Good thick seal- No evidence of spillage.

**Digester 18**- In use –Good thick seal- No evidence of spillage.

**Digester 19** - In use- Weak seal - No evidence of sludge spillage.

**Digester 20** - In use –Good thick seal- No evidence of spillage.

**GENERAL**

**Sludge Screening House**

Door closed at time of inspection.

**Imported Sludge**

No data provided.

**Final Settlement Tanks East Side of Works**

The 8 circular tanks previously used as PSTs are now being used as final tanks (71-78) – currently hoses being used to break up sludge on surface of all tanks.

**East Side Raw Sludge Screen House**

Doors closed at time of inspection.

**West Side Aeration Lanes (Old)**

Battery C aeration feed channel 100% obstructed in one channel (left) – requires jetting (TW advise that there is continuing flow below surface).

**West side primary settlement tanks (PST)**

Rectangular PSTs – no issues

Circular PST's 9, 10 & 11 in use – all have large fat deposits and algae on surface – requires hoses to break-up.

Number 12 drained down out of service.

**New Works (West Side) Battery E**

No issues.

**Pasteurisation Plant**

Streams 2, 7, 8 and 10 out of service.

**Skips**

2x small (blue) skips – rear of sludge screen house both empty – quantity of rag on ground in surrounding area that requires clean-up.

1x open container grit skip (empty) uncovered and 1x 10-Yard Rag skip (covered) at rear of Sludge Screening House.

**Odour Control Unit (OCU) performance monitoring: 26/07/2023**

<b>Plant</b>	<b>Reading (ppm)</b>	<b>Action Level (ppm)</b>	<b>Compliant</b>
Main pumping station inlet	Not provided	Unknown	Unknown
Main pumping station outlet	0.037 0.037 0.037	0.2	No
East OCU	0.014 0.014 0.014	0.05	No
West inlet	0.018 0.018 0.018	0.05	Yes
Sludge reception inlet	-	-	-
Sludge reception outlet	-	-	-
Thickening plant inlet	-	-	-
Thickening plant outlet	0.021 0.19 0.19	0.6	Yes
New West inlet (OCU 11)	0.030 0.030 0.030	0.5	Yes
Pasteurization (OCU 12)	0.0015 0.015 0.015	0.5	No
Transfer PS inlet	0.009 0.009 0.009	-	-
Transfer PS outlet	0.04 0.04 0.04	0.6	Yes
GBT Plant OCU Outlet	0.028 0.028 0.028	-	-

